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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,340	10/17/2003	Yolla B. Levitt	58981US002	7082
32692	7590	12/28/2005	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			KUGEL, TIMOTHY J	
			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/687,340

Applicant(s)

LEVITT ET AL.

Examiner

Timothy J. Kugel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 25 and 27-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4/23/04, 2/28/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-29 are pending as filed on 17 October 2003. Claims 25 and 27-29 are withdrawn from consideration.

Election/Restrictions

2. Claims 25 and 27-29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 28 November 2005.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

3. Applicant's election with traverse of the species of surfactant component of claim 7—ethoxylated acetylenic diol—and the species of stabilizer component of claim 11—aralkyl sulfonate—in the reply filed on 28 November 2005 is acknowledged. The traversal is on the grounds that the generic claims 6, 18, 10 and 21 include sufficiently few related species that a search and examination on all the species would not impose a serious burden. This is not found persuasive because the generic claims present a myriad of genera, which would impose a significant burden to search and examine.

The requirement is still deemed proper and is therefore made **FINAL**.

Specification

4. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

5. The use of the trademarks KRATON, TRINITRON, HORIBA, MITSUBISHI, PANASONIC, ACCU-CHEK, RODACAL, SURFYNOL, TAGAT, LAMBENT and ZONYL have been noted in this application. They should be capitalized wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner that might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 15-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear if claim 15 is directed to a coated substrate or to a coating intended for use on a non-porous substrate. For the purpose of examination, claim 15 was construed to be directed toward a coating intended for use on a non-porous substrate.

Further claims 23 and 24 each recite the limitation "the coating of claim 13."

There is insufficient antecedent basis for this limitation in the claim. For the purpose of examination, each of claims 23 and 24 were construed to recite, "the coating of claim 15."

Claim Rejections - 35 USC § 102 and/or 35 USC § 103

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-11, 13-21, 23 and 26 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US Patent 6,908,453 (Fleming hereinafter).

Fleming teaches surfaces provided with a hydrophilic coating to enhance fluid transport provided by coating the desired surface or surfaces using a surfactant solution that includes from about 0.05% to about 0.5%, by weight, branched chain sodium

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dodecylbenzene sulfonate—the elected stabilizer—and from about 0.10% to about 0.6%, by weight, ethoxylated acetylenic diol—the elected surfactant—in a solvent including a 70/30 mix of isopropyl alcohol and water (Column 6 Lines 5-13). The dried coating composition calculates to a 0.2:1 to 12:1 ratio of surfactant to stabilizer.

Since Fleming teaches the same composition as claimed, one of ordinary skill in the art at the time the invention was made would have expected that the results of the Spreading Drop Test, the phase of the surfactant composition at below 25° C, the melting point of the stabilizer and the contact angle on the hydrophilic surface of the Fleming composition would inherently be the same as claimed.

Where applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103. "There is nothing inconsistent in concurrent rejections for obviousness under 35 U.S.C. 103 and for anticipation under 35 U.S.C. 102." *In re Best*, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA 1977).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

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11. Although not directed to the elected species of surfactant, in the interest of compact prosecution, claims 1, 4, 5, 8-11, 13-17, 20, 21, 23, and 26 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over UK Patent GB 1235918 (Weigel hereinafter). Weigel has been designated as an X reference on the International Search Report for PCT/US2004/032741, which is a continuation of the instant application.

Weigel teaches a coating on a surface (Page 1 Lines 13-17) comprising an anionic surfactant—including the elected species of stabilizer, alkyl aryl sulfonate—and a non-ionic surfactant—including polyoxyalkylene adducts—at concentrations of from 1 to 100 grams/liter—which calculates to 0.1 to 1.0%—in water, wherein the ratio of anionic surfactant to non-ionic surfactant in the dried coating is 1:1 (Page 1 Lines 57-76 and Example 5 Page 4).

Since Weigel teaches the same composition as claimed, one of ordinary skill in the art at the time the invention was made would have expected that the results of the Spreading Drop Test, the phase of the surfactant composition at below 25° C, the melting point of the stabilizer and the contact angle on the hydrophilic surface of the Weigel composition would inherently be the same as claimed.

Where applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103. "There is nothing inconsistent in concurrent

rejections for obviousness under 35 U.S.C. 103 and for anticipation under 35 U.S.C. 102." *In re Best*, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA 1977).

12. Although not directed to the elected species the in the interest of compact prosecution, claims 15-18, 20, 23, 24 and 26 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over European Patent EP 1101803 (Kanno hereinafter). Kanno has been designated as an X reference on the International Search Report for PCT/US2004/032741, which is a continuation of the instant application.

Kanno teaches a coating composition for use on substrates such as resin (Abstract, ¶0001) comprising 0.05 to 2% of a surfactant (¶0020) or combination of surfactants (¶0015)—including 1:1 ratios of nonionic surfactants, such as polyoxyalkylene oxides, and fluorosurfactants (¶¶0013-0014 and Example 6 Table 1 Page 8) in water and water soluble solvents such as methanol, ethanol, n- and isopropyl alcohol, and n-, iso-, s- and t-butyl alcohol (¶¶0021-0024 Examples 1-9 Table 1 Page 8).

Since Kanno teaches the same composition as claimed, one of ordinary skill in the art at the time the invention was made would have expected that the results of the Spreading Drop Test, the phase of the surfactant composition at below 25° C, the melting point of the stabilizer and the contact angle on the hydrophilic surface of the Kanno composition would inherently be the same as claimed.

Where applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but

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the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103. "There is nothing inconsistent in concurrent rejections for obviousness under 35 U.S.C. 103 and for anticipation under 35 U.S.C. 102." *In re Best*, 562 F.2d 1252, 1255 n.4, 195 USPQ 430, 433 n.4 (CCPA 1977).

13. Claims 1-24 and 26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent 4,784,789 (Jeschke hereinafter) in view of 6,313,182 (Lassila hereinafter).

Jeschke teaches a composition for treating surfaces (Column 1 Lines 5-12) comprising 0.02 to 5% of an amphoteric polymer (Column 2 Lines 22-48)—including anionic surfactants such as ethoxylated alkenols (Column 3 Lines 19-25)—and a surfactant—including alkylbenzene sulfonates containing 9 to 15 carbons in the alkyl group and alkali metals thereof (Column 3 Lines 31-63) from this which, one of ordinary skill in the art would immediately envisage the alkali metal salt of dodecyl benzene sulfonate—in a 20:1 to 1:1 ratio (Column 2 Lines 22-37) dissolved in water and a water soluble solvent—including C₂-C₁₂ alcohols such as ethanol and isopropanol (Column 5 Lines 8-20 and Example 1 Columns 8 Lines 30-47).

Jeschke does not disclose expressly the use of the elected acetylenic diol ethylene oxide adduct.

Lassila discloses coating compositions comprising acetylenic diol ethylene oxide adducts (Abstract, Column 1 Lines 10-30 and Column 1 Line 39 – Column 2 Line 10).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the acetylenic diol ethylene oxide adduct of Lassila in the

composition of Jeschke. The motivation to do so would have been to take advantage of the significant advantages of the alkoxylated acetylenic diols including the ability to be applied to a variety of substrates, the ability to reduce coating defects, their environmental friendliness, and their capability to control foam (Lassila Column 6 Lines 29-55).

Since Jeschke and Lassila combine to teach the same composition as claimed, one of ordinary skill in the art at the time the invention was made would have expected that the results of the Spreading Drop Test, the phase of the surfactant composition at below 25° C, the melting point of the stabilizer and the contact angle on the hydrophilic surface of the Jeschke/Lassila composition would inherently be the same as claimed.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Regarding European Patent EP 0981172 (Callahan hereinafter), which has been designated as an X reference on the International Search Report for PCT/US2004/032741, which is a continuation of the instant application: Callahan teaches a hydrophilic polyolefin article—including a film coated with a surfactant and an ethylene vinyl alcohol stabilizer, but teaches a significantly higher concentration—1.5 to 3%—of stabilizer than instantly claimed.

Regarding US Patent 3,736,172 (Delano hereinafter), which has been designated as an X reference on the International Search Report for PCT/US2004/032741, which is a continuation of the instant application: Delano teaches

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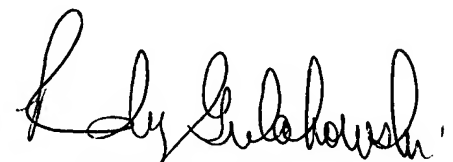
a coating comprising a surfactant but fails to teach a mixture of a surfactant with a stabilizer.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy J. Kugel whose telephone number is (571) 272-1460. The examiner can normally be reached Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJK
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